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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,993	07/10/2001	Arnold M. Escano	ENDOV-51641	7940
24201 7	590 12/18/2002			
	PATTON LEE & UT	EXAMINER		
6060 CENTER		BLANCO, JAVIER G		
TENTH FLOO LOS ANGELE		ART UNIT	PAPER NUMBER	
<del>-</del> , •	.,		3738	_
			DATE MAILED: 12/18/2002	
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

, ,		Application No.	Applicant(s)				
Office Action Summary		09/901,993	ESCANO ET AL.	(M			
		Examiner	Art Unit				
		Javier G. Blanco	3738				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
1)[	Responsive to communication(s) filed on 30 S	September 2002 .					
2a)⊠	· · · · · · · · · · · · · · · · · · ·	s action is non-final.					
3)	Since this application is in condition for allowa	•	osecution as to the me	erits is			
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>							
4) Claim(s) 1-23 is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-23</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
9) The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>							
Attachmen	t(s)						
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152				

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#### **DETAILED ACTION**

### **Drawings**

- 1. The Examiner approves the proposed drawing corrections of Figures 2, 3, and 7 (filed on September 30, 2002 and entered as Paper # 6). A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.
- 2. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 4. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 19, 20 recite as a new claim limitation "a spacing structure". Although the disclosure and the drawings show "shoe device 70" comprising "through holes 80", a "spacing structure" is vague and renders the claims vague and indefinite as to the scope of the "shoe device 70".

### Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.



6. Claims 1-13 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shull et al. (US 6,143,022; cited in previous PTO –892) in view of Amstrup (US 5,476,508; cited in Applicants' IDS).

Shull et al. disclose a medical device comprising a body portion and two end cuffs. The medical device further comprises at least one shoe device being configured at one pair of converging struts (see Figures 2 and 7; see Abstract; see column 6, lines 31-43 and lines 52-60; column 7, lines 43-55; see entire document).

Shull et al. do not disclose the shoe device as "including a spacing structure that maintains the struts in a spaced relationship". However, Amstrup discloses a stent comprising struts/filaments 13 connected in a spaced relationship by connections 16 (= shoe devices) at crossing regions 12 in order to "guarantee a stable crossing region which can accept large restoring forces in a movable fashion" (see Figure 1; see column 4, lines 16-23). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teaching of struts connected in a spaced relationship by connections (= shoe devices) at crossing regions, as taught by Amstrup, with the stent of Shull et al., in order to guarantee a stent with stable crossing regions which can accept large restoring forces in a movable fashion.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shull et al. (US 6,143,022) in view of Amstrup (US 5,476,508) as applied to claims 1-13 and 18-23 above, and further in view of Schmitt et al. (US 5,503,636; cited in Applicants' IDS).

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Shull et al., in view of Amstrup, disclose the claimed invention except for not disclosing the shoe device as been made of plastic. However, Schmitt et al. teach a stent with converging struts enclosed or jacketed in plastic in order to impart rubber elastic properties and help maintain the structural integrity of the stent (see Figures 3A and 4; see column 5, lines 18-26 and lines 32-39; see entire document). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used plastic, as taught by Schmitt et al., as Shull et al.'s shoe device material, in order to impart rubber elastic properties and help maintain the structural integrity of the stent.

8. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shull et al. (US 6,143,022) in view of Amstrup (US 5,476,508) as applied to claims 1-13 and 18-23 above, and further in view of Schmitt (US 5,443,499; cited in Applicants' IDS) and Duffy et al. (US 6,086,611; cited in previous PTO-892).

Shull et al., in view of Amstrup, disclose the claimed invention except for the shoe portion not comprising a plurality of holes. However, Schmitt discloses gluing together converging struts (in fact creating a shoe device; see Figure 8) in order to maintain the structural integrity of the stent (see Figure 8; see column 8, lines 16-21; see also entire document). It is inherent that since the converging struts are glue together, each individual strut will be kept inside a hole and in a spaced relationship with adjacent strut. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used a shoe device with a plurality of holes, shown and inherent in Schmitt's teaching, with the medical device of Shull et al., in order to maintain the structural integrity of the stent.

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Duffy et al. disclose using connectors 9 with through holes, in order to impart a high mechanical strength and maintain the structural integrity of the stent (see Figures 1A, 5A, and 5B; see column 2, lines 35-37; column 4, lines 54-67; column 5, lines 8-13 and lines 59-63; see also entire document). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used a shoe device with through holes, as taught by Duffy et al., with the medical device of Shull et al., in order to impart a high mechanical strength and maintain the structural integrity of the stent.

# Response to Arguments

9. Applicant's arguments with respect to claims 1, 19, and 20 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Nott et al. (US 6,013,093), Shaolian et al. (US 6,197,049), and Gilson et al. (WO 99/51165).
- 11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javier G. Blanco whose telephone number is 703-605-4259. The examiner can normally be reached on M-F (7:00 a.m.-4:30 p.m.), first Friday of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 703-308-2111. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

December 13, 2002

Primary Examiner